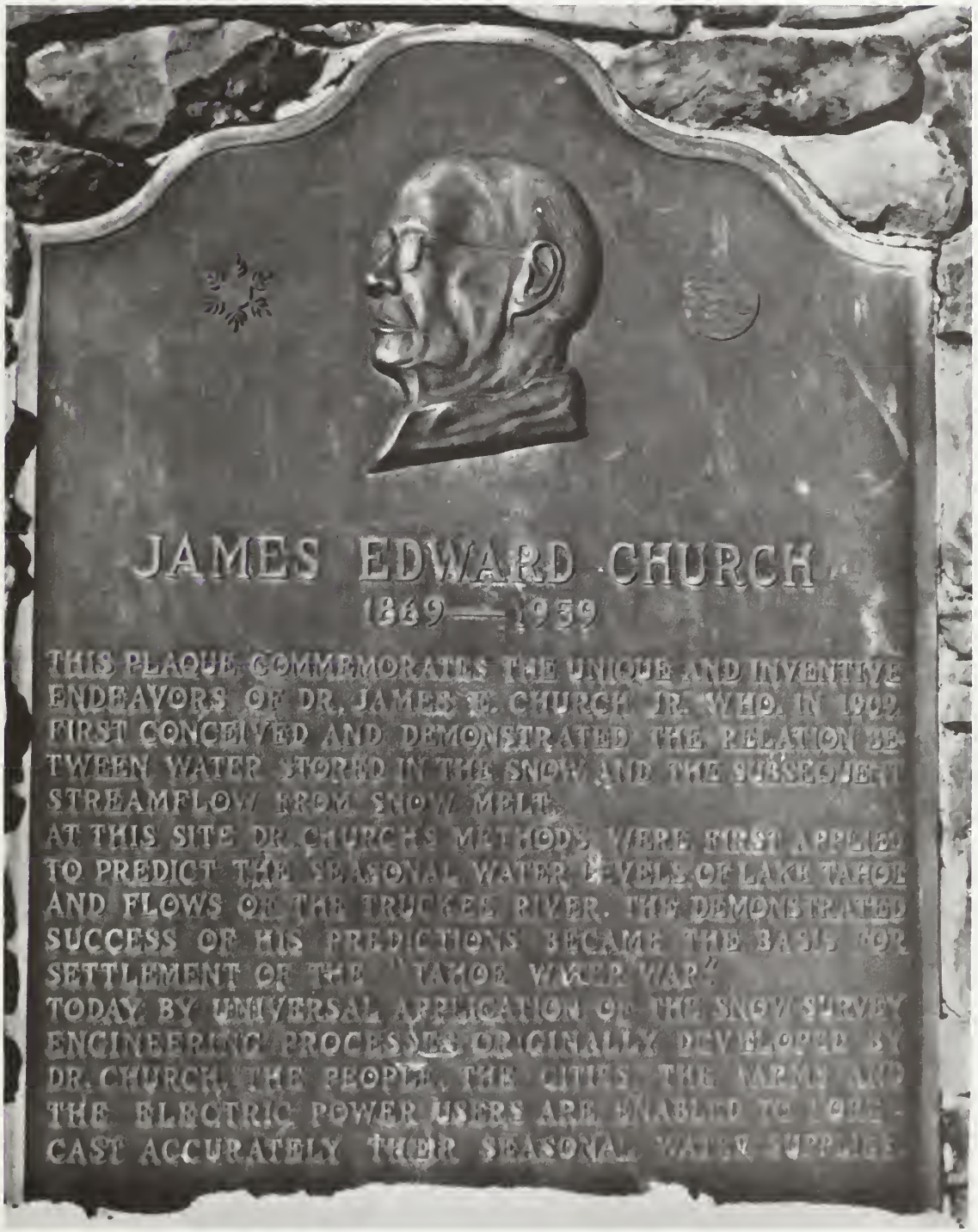
United States
Department of
Agriculture

Soil
Conservation
Service

Spokane,
Washington

Washington Water Supply Outlook

FEBRUARY 1, 1989



Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Soil Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

An error is associated with each forecast, and this error decreases as the season progresses and more data becomes available. To express the range of error that can be expected, "most probable" forecasts are issued along with a range representing a "reasonable minimum" and a "reasonable maximum". Actual streamflow can be expected to fall within this range in eight out of ten years. Additionally two specific scenarios are provided based on the assumption that subsequent precipitation will be "wet", above average, or "dry", below average.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola Ave., Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Building A, 3rd floor, Denver, CO 80211
Idaho	3244 Elder Street, Room 124, Boise, ID 83705
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	W. 920 Riverside, Room 360, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 "B" Street, Room 3124, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209-3489.

Water supply reports published by other agencies:

California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Washington
Water Supply Outlook

and

Federal — State — Private
Cooperative Snow Surveys

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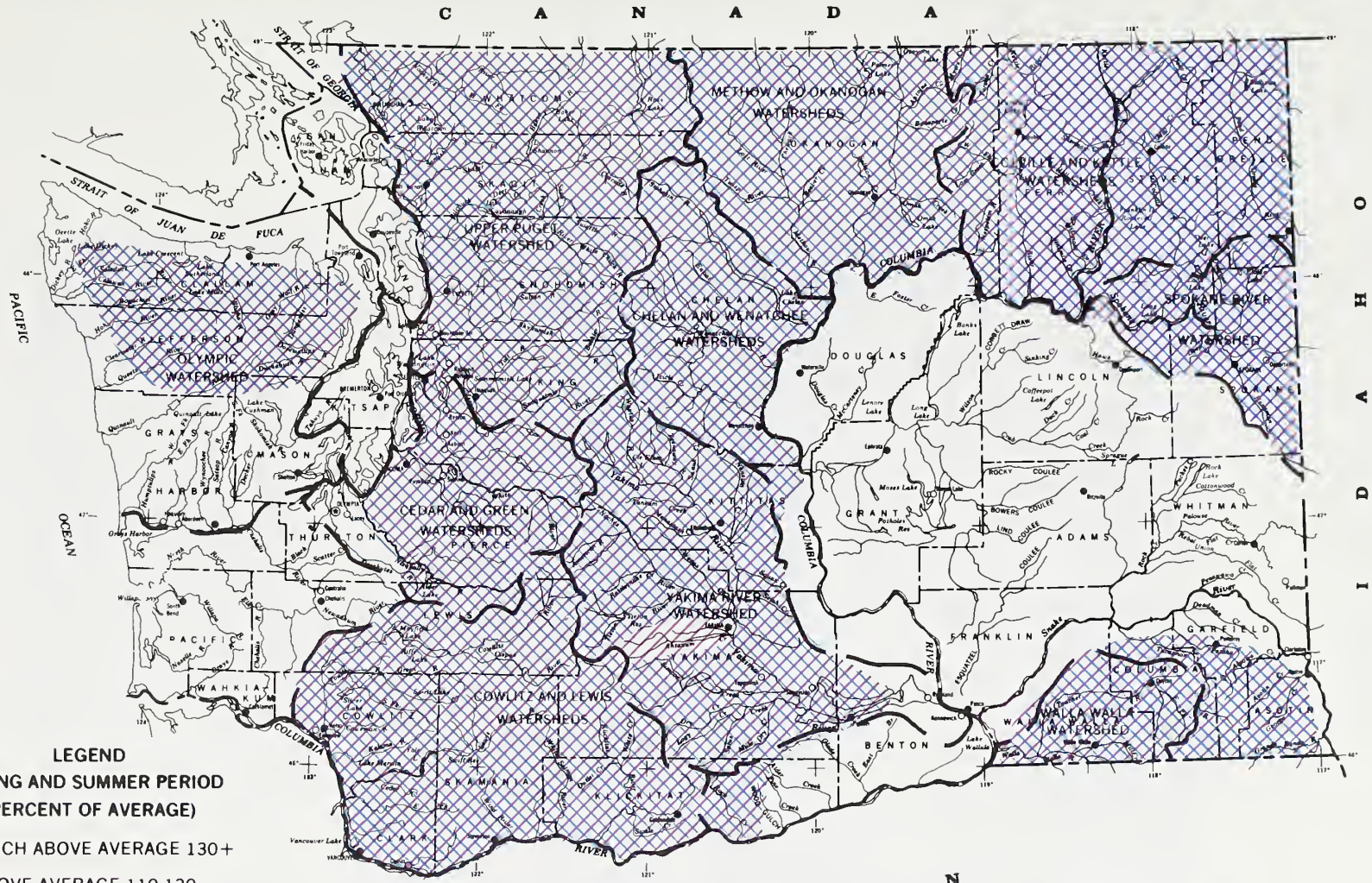
U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE



LEGEND
SPRING AND SUMMER PERIOD
(PERCENT OF AVERAGE)

- MUCH ABOVE AVERAGE 130+
- ABOVE AVERAGE 110-130
- NEAR AVERAGE 90-110
- BELOW AVERAGE 70-90
- MUCH BELOW AVERAGE 70+ LESS
- NOT FORECAST
- WATERSHED BOUNDARY

FEBRUARY 1, 1989

STREAMFLOW PROSPECTS
WASHINGTON

0 25 50 75 100 MI

0 50 100 150 KM

SOURCE: Data compiled by SCS Field Personnel.

JANUARY 1986 4-R-39641

BASE 4-R-39260

GENERAL OUTLOOK

SUMMARY:

JANUARY STREAMFLOWS WERE BELOW AVERAGE AND VARIED FROM 26% OF NORMAL ON THE PALOUSE RIVER TO 93% FOR THE COLUMBIA RIVER AT THE DALLES. THE SNOWPACK SHOWED SOME IMPROVEMENT IN THE SOUTHERN HALF OF WASHINGTON WITH THE LEWIS, WALLA WALLA AND GREEN RIVER BASINS ALL OVER 100% OF AVERAGE. THE 1989 WATER YEAR PRECIPITATION IS NEAR NORMAL IN ALL BASINS EXCEPT THE OKANOGAN AND COLVILLE. RUNOFF FOR 1989 IS FORECASTED TO BE AVERAGE OVER MOST OF WASHINGTON. THESE FORECASTS VARY FROM 105% ON THE CEDAR RIVER TO 83% ON AHTANUM CREEK. RESERVOIR STORAGE REMAINS BELOW NORMAL AT THE MAJOR IRRIGATION PROJECTS THROUGHOUT THE STATE, WITH THE RESERVOIRS IN THE YAKIMA BASIN 77% OF NORMAL. TEMPERATURES WERE ABOVE NORMAL DURING JANUARY WITH THE OKANOGAN SEVEN DEGREES ABOVE NORMAL AND THE NORTH PUGET EIGHT DEGREES ABOVE. NOTE: THE TERMS "NORMAL" AND "AVERAGE" AS USED IN THIS PUBLICATION, ARE THE SAME.

SNOWPACK:

Snowpack improved in most areas of Washington during January. The Walla Walla Basin at 127% of average remained the best. Along the west slopes of the Cascade Mountains, the Lewis-Cowlitz Basin was 103% and the White-Green Basin was 107%. The Eastern slopes of the Cascade Mountains are lower with the Yakima Basin at 88% and the Chelan at 92% of normal. Maximum snow cover is at the Cayuse Pass snow course with 142 inches of snow and 53.2 inches of water content on the ground. This site normally would have 54.1 inches of water content.

PRECIPITATION:

January precipitation was above normal on the western slopes of the Cascade Mountains and the Walla Walla Basin, but below average for the eastern part of the state. Some of the below normal basins were the Spokane at 92%, the Colville-Pend Oreille at 43%, and the Chelan at 60% of normal. Above average basins include North Puget at 110%, White-Green at 119% and the Olympic at 109%. The highest percent of normal was in the Walla Walla Basin with 170%. SNOTEL sites in Washington showed the year-to-date precipitation values to be 95% of average.

RESERVOIRS:

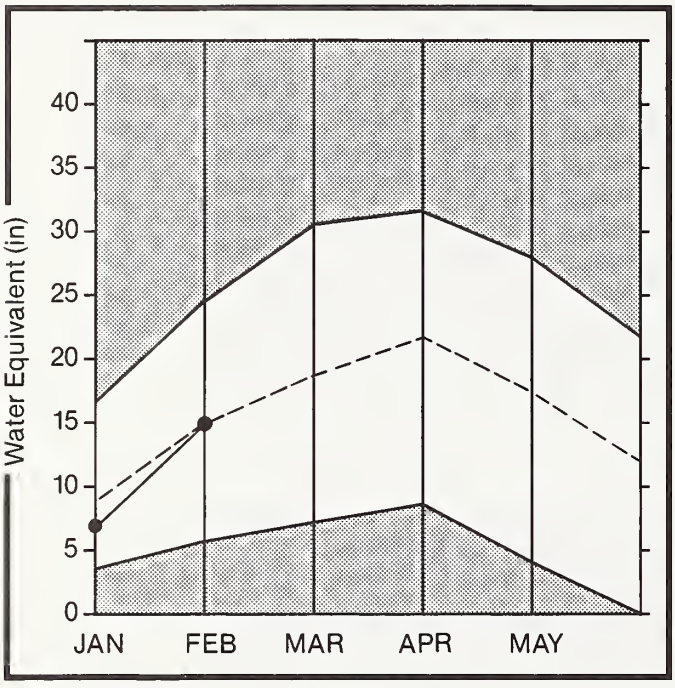
January reservoir storage in the Yakima Basin was 495,100 acre feet, 77% of average, up from 401,500 acre feet, 69% of average. Other major reservoir storage include Roosevelt at 45% of normal. Banks Lake is at 112% and the Okanogan reservoirs remained at 104% of February 1 average. The power reservoirs contain the following: Coeur d'Alene Lake 109,200 acre feet or 53% of normal, Chelan Lake 322,400 acre feet at 72%, down from 110% last month, and Ross Lake at 80% of average.

STREAMFLOW:

January streamflows were below normal in most areas of Washington, continuing a trend established during the preceding summer. Streamflow varied from 26% on the Palouse River and the maximum of 93% from the Walla Walla River. On the west side of the Cascade Mountains, runoff from the Chehalis was 77%, the Skagit 77% and the Skykomish 89% of normal. The eastern slope of the Cascades runoff on the Yakima was 74% and the Okanogan at 58% of average. The

SPOKANE

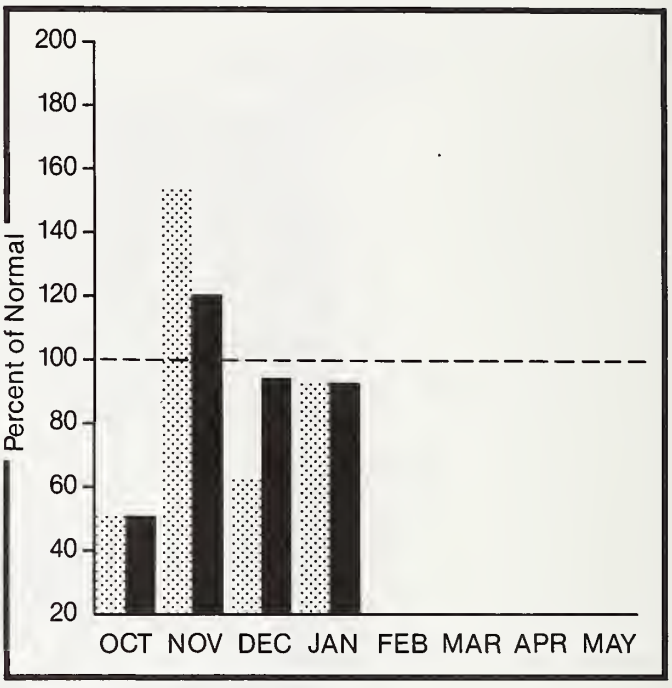
Mountain snowpack* (inches)



*Based on selected stations

Maximum
Minimum
Average
Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation
Year to date precipitation

SPOKANE RIVER BASIN

WATER SUPPLY OUTLOOK:

Streamflow during January on the Spokane River was 45% of average at Spokane, same as December. Storage in Coeur d' Alene Lake was 109,200 acre feet compared to 118,200 last month; average storage in Coeur d'Alene for February 1 is 205,400 acre feet. Forecasted runoff for the Spokane River Basin is 92% of normal. This forecast is based on a snowpack 100% of average and a water year-to-date precipitation value 92% of normal. Precipitation for January was 92% of average. Maximum snow water again occurred at the Lost Lake snow course with 106 inches of snow with 35.2 inches of water content, February 1 average for this site is 39.1 inches. Temperatures averaged three degrees above normal during January.

For more information contact your local Soil Conservation Service office.

SPOKANE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
SPOKANE nr Post Falls (2)	APR-SEP	2590	92	3130	2050	3750	1460	2820
	APR-JUL	2500	92	3020	1980	3620	1410	2723
SPOKANE at Long Lake	APR-JUL	2800	92			4440	1280	3045

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
COEUR O'ALENE	291.2	109.2	80.2	205.4

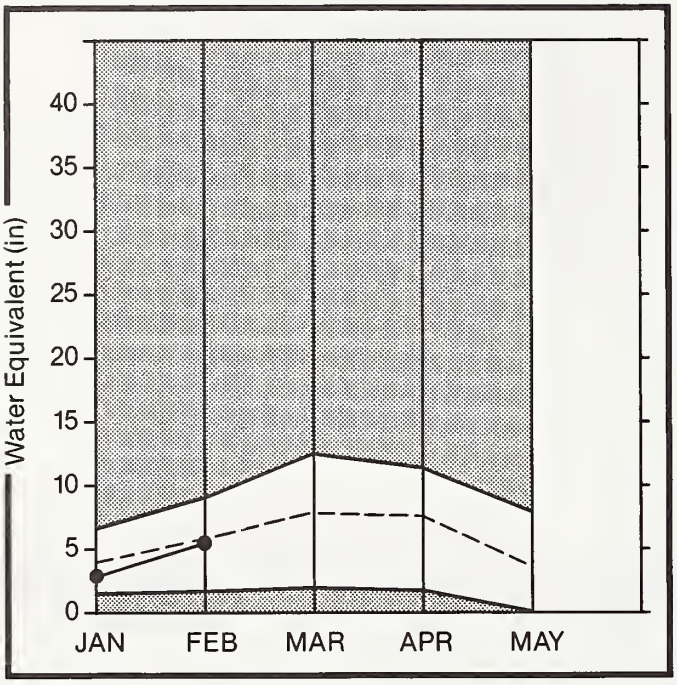
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	THIS YEAR AS % OF AVERAGE
Spokane River	13	179	98

WET SUBS. and DRY SUBS. represent 150 and 50 percent subsequent precipitation events respectively.
REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
(1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.
(2) - Corrected for upstream diversions or changes in reservoir storage.

COLVILLE - PEND OREILLE

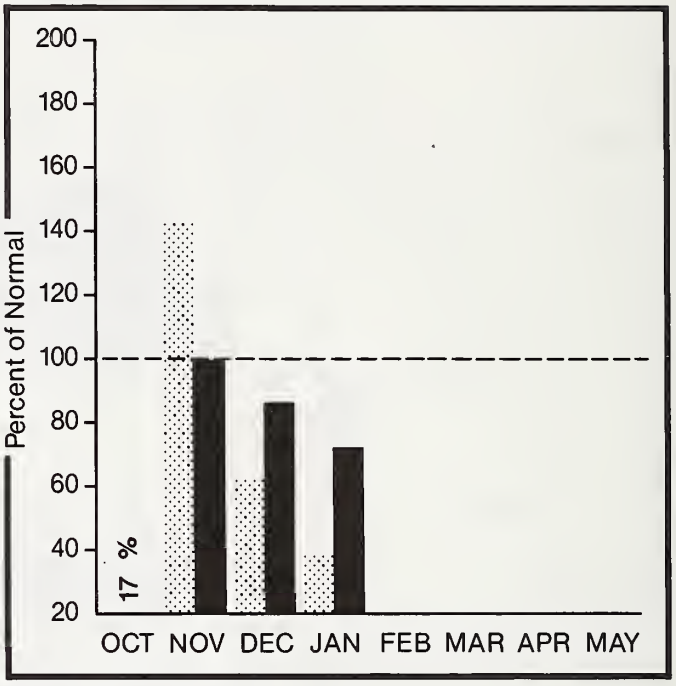
Mountain snowpack* (inches)



*Based on selected stations

Maximum
Minimum
Average
Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation
Year to date precipitation

COLVILLE - PEND OREILLE RIVER BASINS

WATER SUPPLY OUTLOOK:

The forecast for the Pend Oreille River streamflows is 93% of normal for the summer. Other forecasts are the Kettle River and the Colville River both at 90% of normal for the summer runoff period. February snow cover basin-wide is 92% of average, up from 78% last month. Snowpack at Bunchgrass Meadow SNOTEL was 18.8 inches of water. Precipitation during January was 43% of average, bringing the water year-to-date to 73% of normal. Streamflows for December were 62% of average on the Pend Oreille River, 83% on the Kettle River and 92% on the Columbia River at the International Border. Temperatures averaged four degrees above normal for January.

COLVILLE - PEND OREILLE RIVER BASINS

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
PEND OREILLE bl Box Canyon (2)	APR-SEP	14100	93			17900	10300	15170
	APR-JUL	12900	93			16400	9430	13900
	APR-JUN	11100	93			14100	8110	11960
CHAMOKANE CK nr Long Lake	MAY-AUG	8.3	90					9.2
COLVILLE at Kettle Falls	APR-SEP	128	92	135	121	198	59	139
	APR-JUL	118	92			182	54	128
	APR-JUN	109	92			168	50	118
KETTLE nr Laurier	APR-SEP	1750	92	1850	1650	2460	1060	1907
	APR-JUL	1660	92			2330	1010	1807
	APR-JUN	1490	92			2070	905	1622
COLUMBIA at Birchbank (2)	APR-SEP	43900	99			50600	37200	44390
	APR-JUL	35100	99			40800	29400	35440
	APR-JUN	25400	99			29200	21600	25650
COLUMBIA at Grand Coulee Dam (2)	APR-SEP	64300	97			76900	51700	66460
	APR-JUL	54000	97			64600	43400	55730
	APR-JUN	42100	97			50300	33900	43420

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
ROOSEVELT	5232.0	1682.0	3411.9	3749.0
BANKS	715.0	672.2	661.5	599.0

WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	THIS YEAR AS % OF AVERAGE
Colville River	3	122	86
Pend Oreille River	11	141	92
Kettle River	8	126	89

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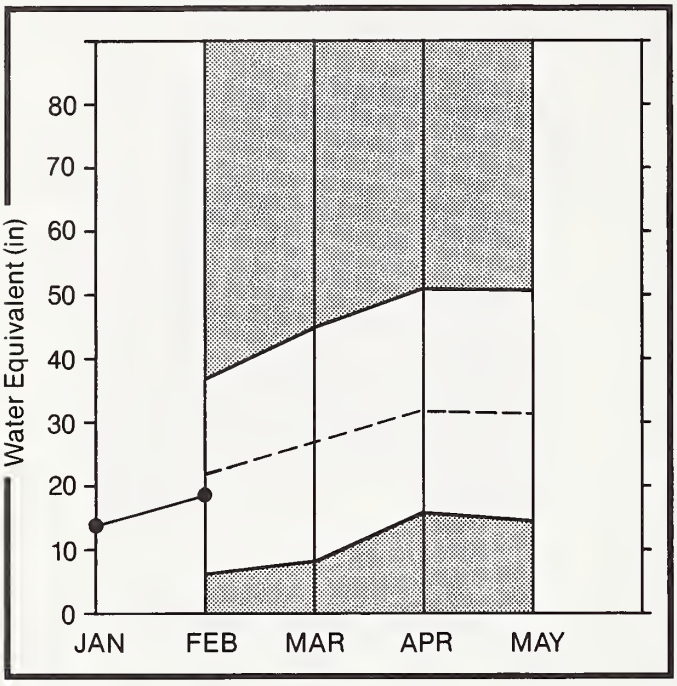
(2) - Corrected for upstream diversions or changes in reservoir storage.

OKANOGAN AND METHOW

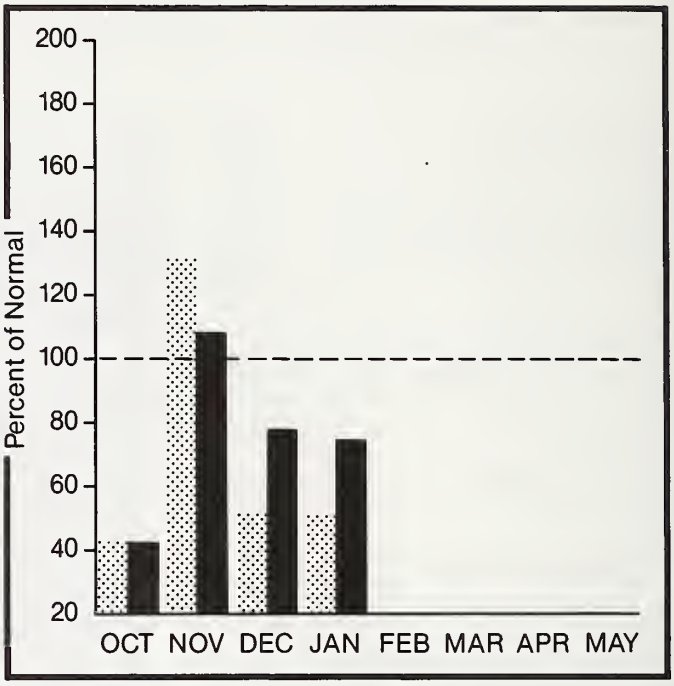
Mountain snowpack* (inches)



*Based on selected stations

Maximum
Minimum
Average
Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation
Year to date precipitation

OKANOGAN - METHOW RIVER BASINS

WATER SUPPLY OUTLOOK:

January precipitation in the Okanogan was 55% of normal, with water year-to-date 71% of average. Temperatures were seven degrees above normal for the month. Snow cover, as of February 1, is 82% of average on the Okanogan-Methow Basin. This is based upon measurements made at 25 snow courses and SNOTEL sites. Maximum snow water occurred at the Harts Pass SNOTEL, elevation 6500 feet, with 29.2 inches of water. Storage in the Conconully Reservoirs is 14,300 acre feet, which is 61% of capacity and 104% of February 1 average. Summer runoff forecasted for the Okanogan River is 92% of normal. The Similkameen River 96% and the Methow River is 93% of normal. Okanogan River streamflow was at 58% of average for January, while the Similkameen River averaged 48%.

For more information contact your local Soil Conservation Service office.

OKANOGAN - METHOW RIVER BASINS

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
SIMILKAMEEN R. nr Nighthawk	APR-SEP	1380	96			1970	805	1432
	APR-JUL	1280	96			1840	745	1333
	APR-JUN	1080	96			1550	630	1128
OKANOGAN R. nr Tonasket	APR-SEP	1520	92			2330	725	1661
	APR-JUL	1370	91			2090	650	1501
	APR-JUN	1140	91			1750	550	1255
METHOW RIVER nr Pateros	APR-SEP	910	93			1310	510	980
	APR-JUL	845	93			1220	475	907
	APR-JUN	715	93			1040	390	769

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
CONCONULLY LAKE (SALMON)	10.5	8.0	7.4	7.5
CONCONULLY RESERVOIR	13.0	6.3	5.2	6.3

WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
Okanogan River	23	115	83
Methow River	4	94	69

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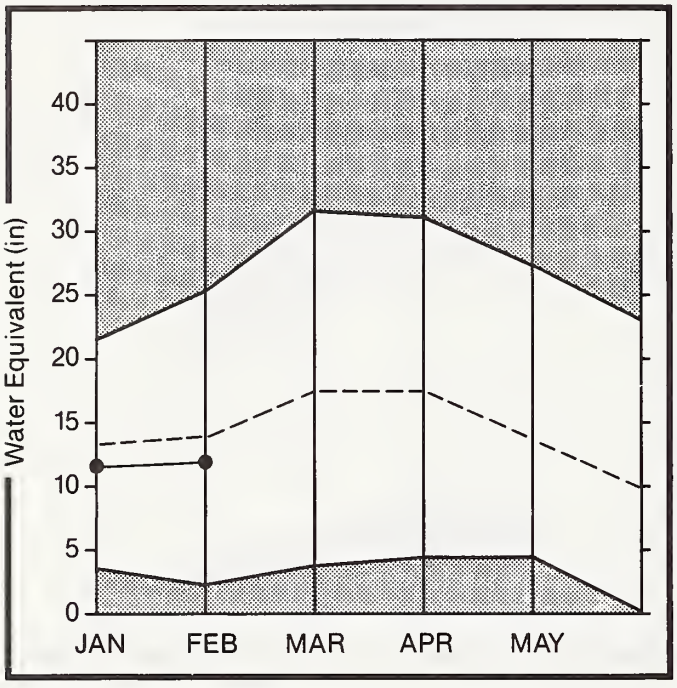
WENATCHEE AND CHELAN

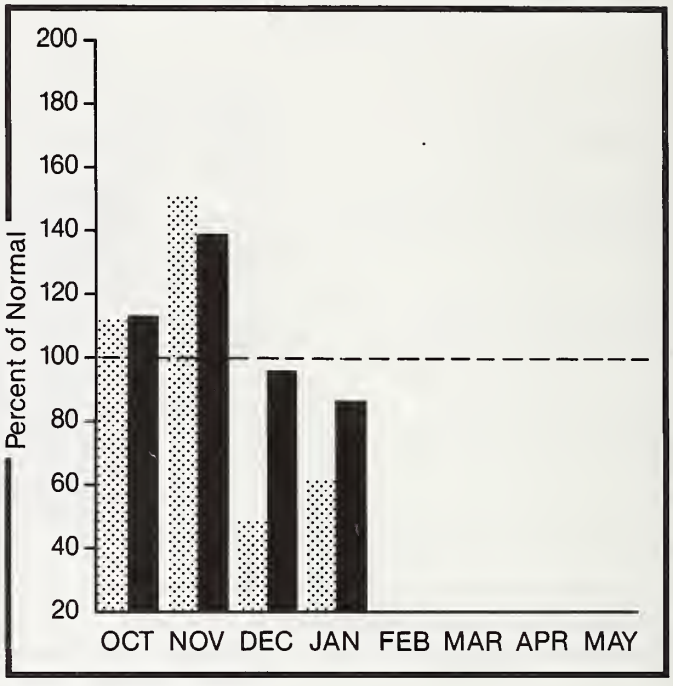
Mountain snowpack* (inches)



*Based on selected stations

Maximum
Minimum
Average
Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation
Year to date precipitation

WENATCHEE AND CHELAN RIVER BASINS

WATER SUPPLY OUTLOOK:

January streamflow within the basin was 81% of normal on the Wenatchee and 77% on the Chelan River. Runoff for the Wenatchee River is forecast to be 103% of normal for the summer. Forecasts in the Chelan River runoff are for 95% average. Precipitation during January was 60% of normal in the basin and 85% from October 1 to February 1. Reservoir storage in Lake Chelan is 322,400 acre feet or 48% of February 1 average and 72% of average. Snowpack in the Wenatchee-Chelan Basin is 87% of normal. Lyman Lake SNOTEL had the most snow water with 43.1 inches on February 1.

For more information contact your local Soil Conservation Service office.

WENATCHEE - CHELAN RIVER BASINS

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
CHELAN RIVER at Chelan 1	APR-SEP	1130	96	1210	1050	1410	835	1182
CHELAN RIVER at Chelan 1	APR-JUL	990	95	1090	875	1250	730	1040
CHELAN RIVER at Chelan 1	APR-JUN	775	95	850	700	980	570	815
STEHEKIN R. at Stehekin	APR-SEP	850	101	935	755	1020	680	844
	APR-JUL	720	101	785	625	865	575	714
	APR-JUN	550	102	595	480	655	440	541
ENTIAT RIVER nr Ardenvoir	APR-SEP	230	99	265	197	290	172	233
	APR-JUL	220	100	255	189	275	165	221
	APR-JUN	170	99	196	146	215	127	171
WENATCHEE RIVER at Plain	APR-SEP	1270	100	1410	1130	1700	840	1270
	APR-JUL	1110	100	1200	1020	1490	730	1113
	APR-JUN	900	100	990	810	1210	595	899
STEMILT nr Wenatchee (miners in)	MAY-SEP	142	103			189	95	138
ICICLE CREEK nr Leavenworth	APR-SEP	385	104	435	340	510	260	370
	APR-JUL	350	103	400	315	465	235	340
	APR-JUN	280	104	320	250	370	188	270
COLUMBIA R. bl Rock Island Dam 2	APR-SEP	70400	97			84100	56700	72250
	APR-JUL	59600	98			71200	48000	61050
	APR-JUN	46300	97			55400	37200	47730

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
CHELAN LAKE	676.1	322.4	191.7	450.6

WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
Chelan Lake Basin	4	104	92
Entiat River	2	79	84
Wenatchee River	7	103	91
Colockum Creek	1	26	25
Squilchuck Creek	0	0	0
Stemilt Creek	2	82	75

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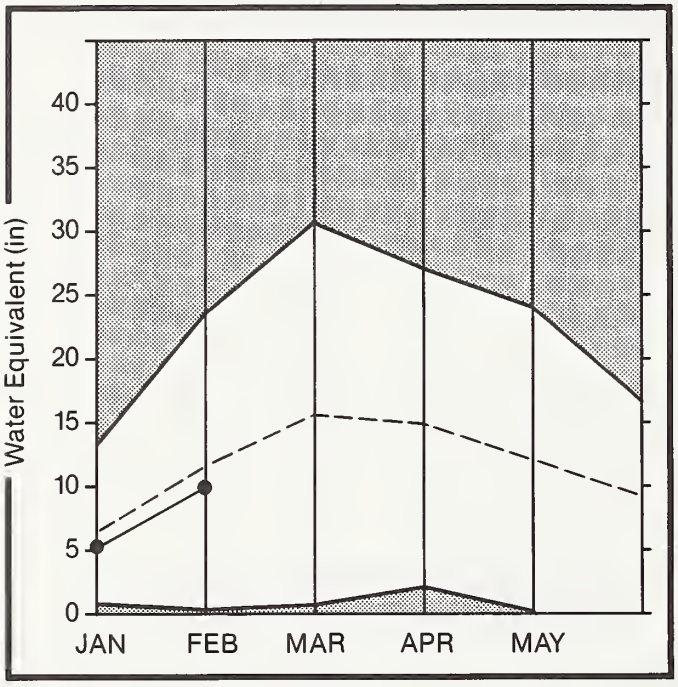
(2) - Corrected for upstream diversions or changes in reservoir storage.

YAKIMA

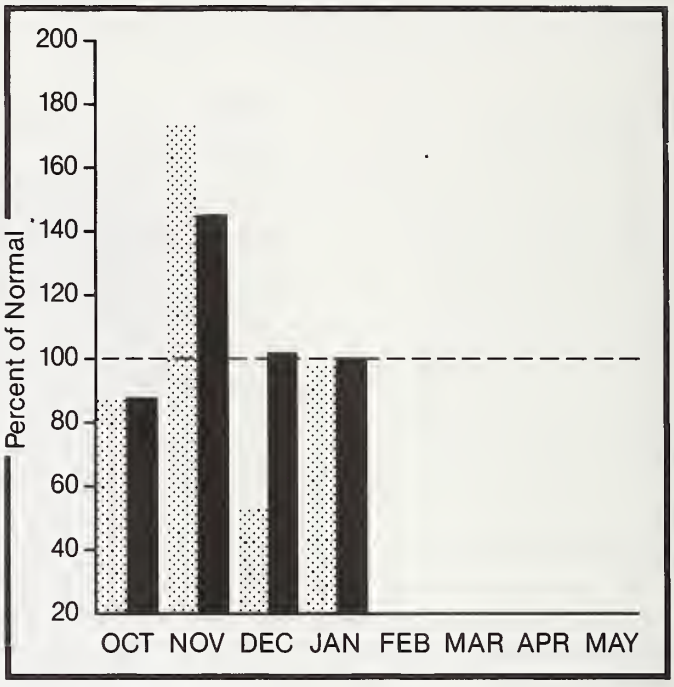
Mountain snowpack* (inches)



*Based on selected stations

Maximum
Minimum
Average
Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation
Year to date precipitation

YAKIMA RIVER BASIN

WATER SUPPLY OUTLOOK:

Forecasts for the Yakima Basin runoff vary throughout the basin as follows: the Yakima River at Cle Elum 101%, Naches River 89%, the Yakima River at Parker 96% and Ahtanum Creek 83%. February 1 reservoir storage for the five major reservoirs was at 495,100 acre feet or 77% of normal, up from 401,500 acre feet last month. Streamflow for the Yakima Basin was 74% of normal. Snowpack is 88% of average in the Yakima Basin based upon 21 snow course and SNOTEL readings. January precipitation was 97% of normal and 100% for the water year-to-date. Temperatures were five degrees above the January average.

For more information contact your local Soil Conservation Service office.

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
YAKIMA RIVER at Martin 1	APR-SEP	134	99	144	124	153	115	136
	APR-JUL	124	98	133	115	142	106	126
	APR-JUN	110	98	119	101	127	94	112
YAKIMA RIVER at Cle Elum 2	APR-SEP	965	101	1170	735	1090	840	951
	APR-JUL	860	102	1050	655	970	750	846
	APR-JUN	750	102	905	565	845	655	735
YAKIMA RIVER nr Parker 2	APR-SEP	1990	96	2200	1760	2530	1450	2075
	APR-JUL	1790	96	1960	1600	2270	1290	1862
	APR-JUN	1580	96	1730	1420	2010	1140	1643
KACHESS RIVER nr Easton 1	APR-SEP	127	95	159	95	147	107	133
	APR-JUL	109	96	135	83	126	92	114
	APR-JUN	98	96	120	74	112	83	102
CLE ELUM RIVER nr Roslyn 1	APR-SEP	465	101	580	350	530	395	459
	APR-JUL	420	101	525	325	480	360	417
	APR-JUN	355	101	445	270	405	305	353
BUMPING RIVER nr Nile 1	APR-SEP	132	95	157	107	170	96	139
	APR-JUL	121	95	144	99	156	88	128
	APR-JUN	100	94	119	82	129	72	106
AMERICAN RIVER nr Nile	APR-SEP	109	90	131	87	139	79	121
	APR-JUL	100	89	119	82	128	72	112
	APR-JUN	85	90	102	68	109	62	94
TIETON RIVER at Tieton 1	APR-SEP	215	88	230	195	280	154	244
	APR-JUL	183	88	198	166	240	131	208
	APR-JUN	148	88	160	136	192	106	168
NACHES RIVER nr Naches 2	APR-SEP	770	90	875	665	1010	530	860
	APR-JUL	695	89	790	600	915	490	779
	APR-JUN	590	88	665	515	775	415	667
AHTANUM CREEK nr Tampico 2	APR-SEP	39	83	37	40	58	20	47
	APR-JUL	36	84	34	36	53	18.8	43
	APR-JUN	31	84	33	28	46	16.2	37

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
KEECHELUS	157.8	97.8	27.6	96.0
KACHESS	239.0	94.8	36.9	170.0
CLE ELUM	436.9	212.6	34.2	251.0
BUMPING LAKE	33.7	9.9	7.9	9.0
RIMROCK	198.0	80.0	46.5	115.0

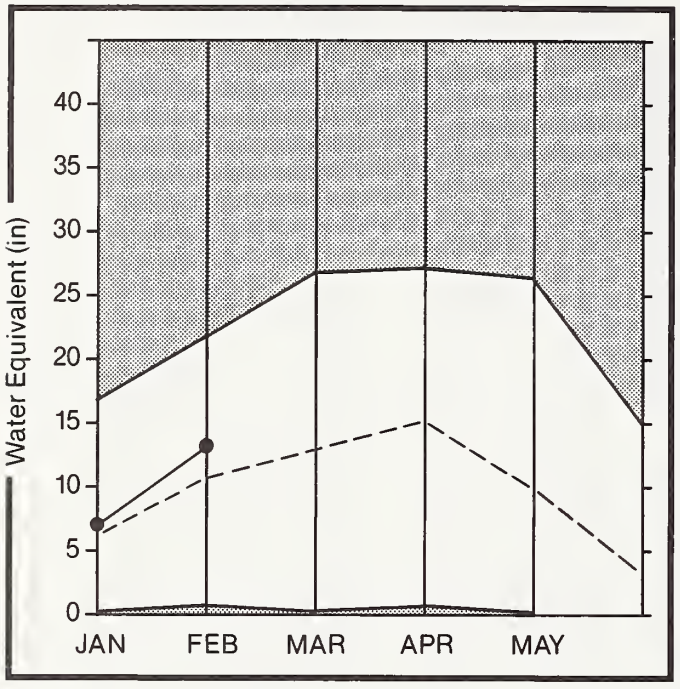
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
Yakima River	18	108	91
Ahtanum Creek	2	81	87

WET SUBS. and DRY SUBS. represent 150 and 50 percent subsequent precipitation events respectively.
REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
(1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.
(2) - Corrected for upstream diversions or changes in reservoir storage.

WALLA WALLA

Mountain snowpack* (inches)



*Based on selected stations

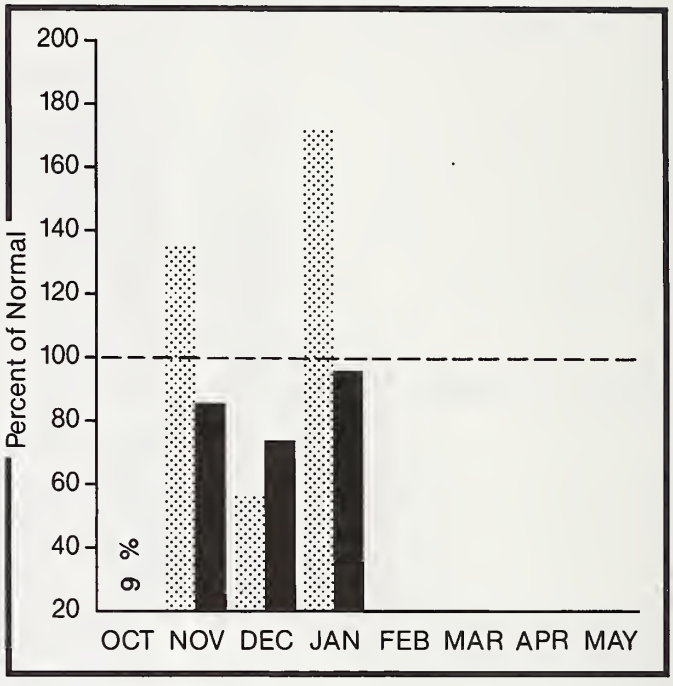
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WALLA WALLA RIVER BASIN

WATER SUPPLY OUTLOOK:

January precipitation was 170% of average bringing the water year-to-date precipitation to 95% of normal, up from 73% last month . Snowpack in the Walla Walla River Basin is 127% of normal. Water content at the Touchet SNOTEL site was 32.6 inches on February 1 up from 19.6 inches last month. The forecast calls for 106% of average streamflow in the Walla Walla River for the coming summer. Streamflow for the Snake River was at 49% of normal for January and 93% on the Walla Walla River. Temperatures were four degree above average for January.

For more information contact your local Soil Conservation Service office.

WALLA WALLA RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
MILL CREEK at Walla Walla	APR-SEP	18.5	106	23	13.8	25	12.4	17.5
	APR-JUL	18.3	106	23	13.8	24	12.2	17.3
	APR-JUN	18.1	106	22	13.7	24	12.1	17.1
SF WALLA WALLA nr MiltonFreewater	APR-JUL	39	107	71	47	71	46	55
COUSE CK nr Milton Freewater	APR-JUL	3.8	106	5.7	1.9	5.6	2.0	3.6
PINE CREEK nr Weston	APR-JUL	2.9	107	4.5	1.4	4.3	1.5	2.7
COLUMBIA R. at The Dalles 2	APR-SEP	97800	96			120000	75300	101800
	APR-JUL	83700	96			103000	64500	87100
	APR-JUN	67600	96			83100	52100	70470

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.

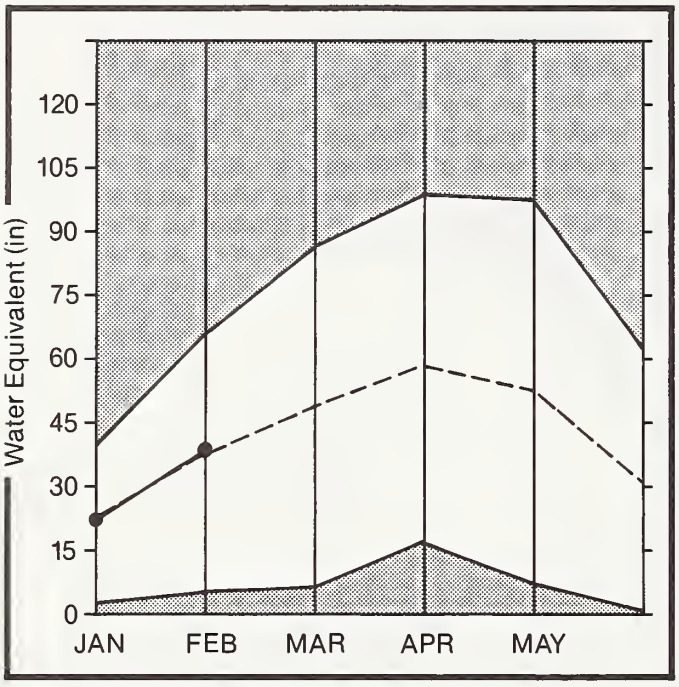
WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
Mill Creek	1	232	127

WET SUBS. and DRY SUBS. represent 150 and 50 percent subsequent precipitation events respectively.
REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
(1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.
(2) - Corrected for upstream diversions or changes in reservoir storage.

COWLITZ AND LEWIS

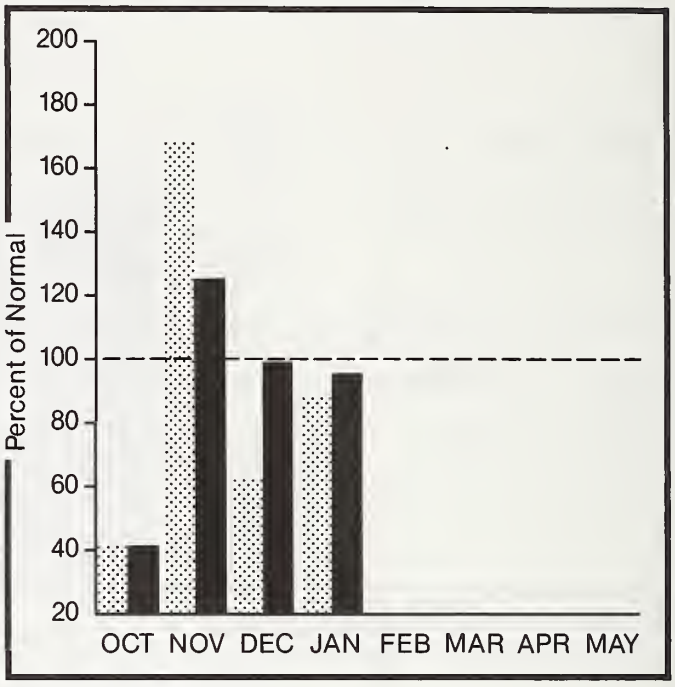
Mountain snowpack* (inches)



*Based on selected stations

Maximum
Minimum
Average
Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation
Year to date precipitation

COWLITZ - LEWIS RIVER BASINS

WATER SUPPLY OUTLOOK:

January precipitation was 88% of normal bringing the water year-to-date precipitation to 95% of average. February 1 snow cover for the Cowlitz-Lewis Basin is 103% of normal, up from 98% last month. The Cayuse Pass snow course has the maximum water content for the basin with a snowpack of 142 inches containing 53.2 inches of water on February 1. Summer runoff forecasts for the Lewis River are 105% and for the Cowlitz River 98%. Temperatures were one degree above normal for January.

For more information contact your local Soil Conservation Service office.

COWLITZ - LEWIS RIVER BASINS

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
LEWIS RIVER at Ariel 2	APR-SEP	1350	109	1550	1150	1810	890	1244
	APR-JUL	1180	109	1340	1040	1560	780	1084
	APR-JUN	1050	110	1180	905	1390	695	958
COWLITZ R. bl Mayfield Dam 2	APR-SEP	2000	98	2550	1900	2830	1170	2036
	APR-JUL	1750	98	2250	1700	2480	1020	1782
	APR-JUN	1480	97	1910	1430	2100	870	1524
COWLITZ R. at Castle Rock 2	APR-SEP	2710	101	3490	2070	3600	1820	2687
	APR-JUL	2360	101	3040	1770	3130	1590	2343
	APR-JUN	2010	100	2590	1550	2700	1390	2015

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.

WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
Cowlitz River	2	134	95
Lewis River	3	155	111

WET SUBS. and DRY SUBS. represent 150 and 50 percent subsequent precipitation events respectively.
REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
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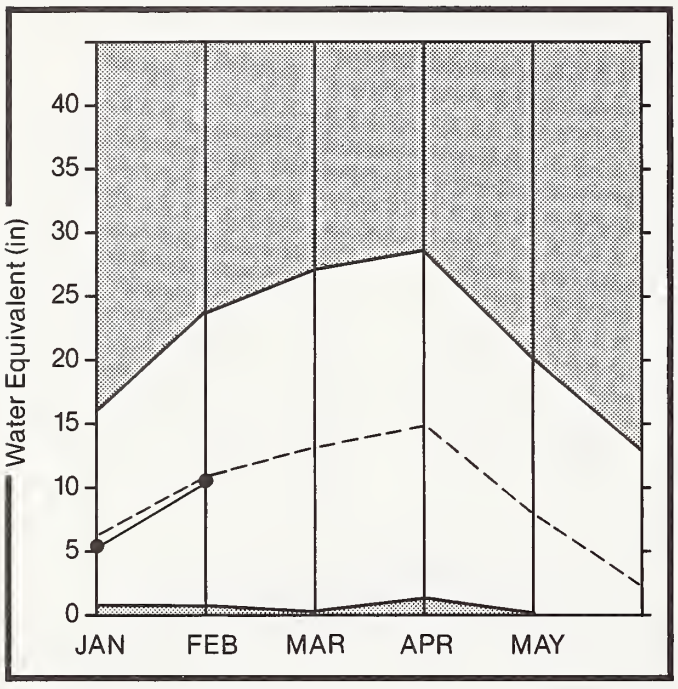
(2) - Corrected for upstream diversions or changes in reservoir storage.

WHITE - GREEN

Mountain snowpack* (inches)



*Based on selected stations

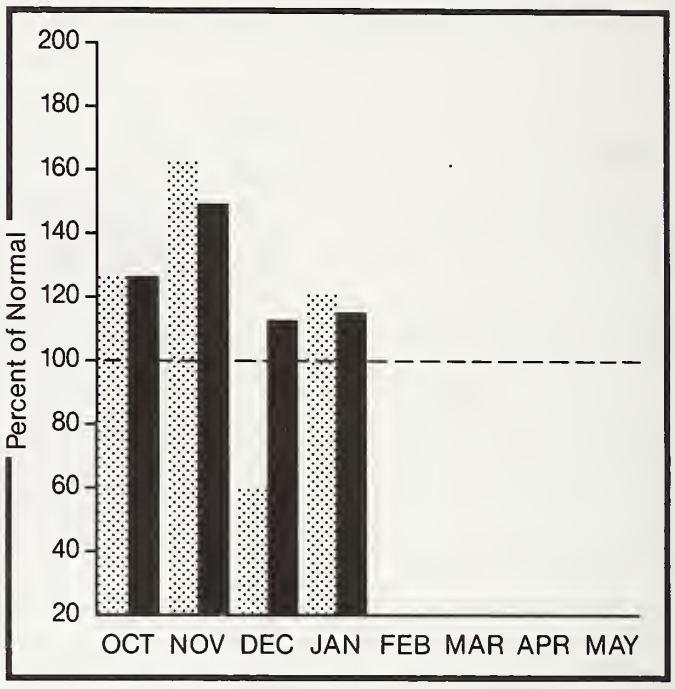
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WHITE - GREEN RIVER BASINS

WATER SUPPLY OUTLOOK:

January precipitation was 119% of normal bringing the water year-to-date to 114% of average. Snowpack is 107% of normal for the basin, up from 87% last month. Summer runoff is forecasted to be 101% on the Green River and 105% of normal and Cedar River. Snow depth at the Cayuse Pass snow course was 142 inches with 53.1 inches of water content on February 1. Temperatures were one degree above average for January.

For more information contact your local Soil Conservation Service office.

WHITE - GREEN RIVER BASINS

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
GREEN RIVER bl Howard Hanson Dam 2	APR-SEP	295	101	345	245	395	193	291
	APR-JUL	260	100	310	220	350	169	261
	APR-JUN	235	100	280	197	320	152	236
CEDAR RIVER nr Cedar Falls	APR-SEP	98	105	134	62	131	65	93

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.

WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
White River	3	114	99
Green River	7	160	113
Cedar River	0	0	0

WET SUBS. and DRY SUBS. represent 150 and 50 percent subsequent precipitation events respectively.
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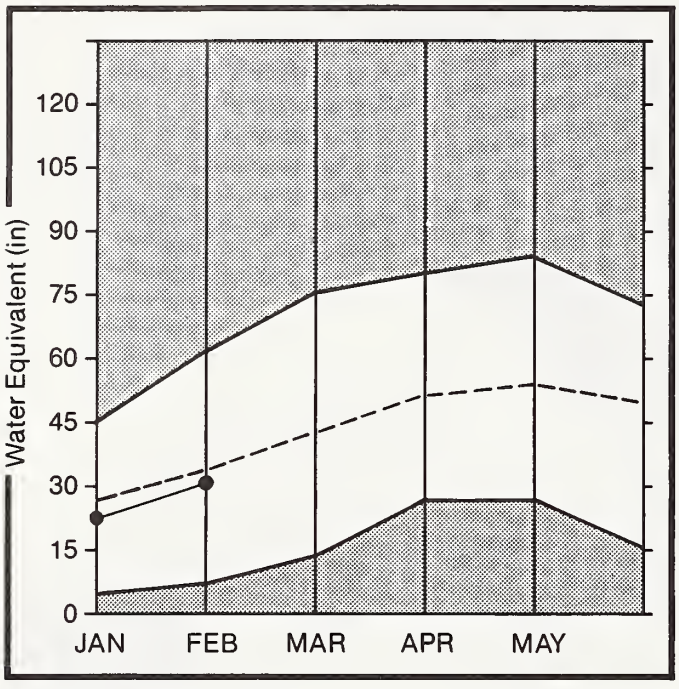
(2) - Corrected for upstream diversions or changes in reservoir storage.

NORTH PUGET SOUND

Mountain snowpack* (inches)



*Based on selected stations

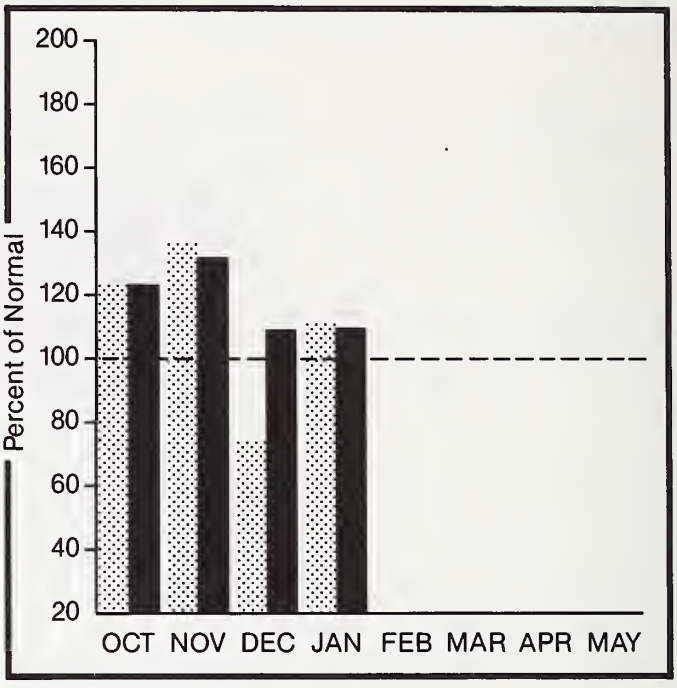
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

NORTH PUGET SOUND RIVER BASIN

WATER SUPPLY OUTLOOK:

January temperatures were one to eight degrees above average. Streamflow on the Skagit River during January was 77% of normal. Runoff for the Skagit River is forecasted to be 95% of normal. Reservoir storage went below average, with Ross Lake at 82% of normal for February 1, 61% of capacity. Precipitation values for January were 110% of average with a water year-to-date at 108% of normal. Snow cover for February 1 in the basin is 88% of normal, with Marten Lake snow course, at 5800 feet, having 132 inches of snow and 52.8 inches of water content.

For more information contact your local Soil Conservation Service office.

NORTH PUGET SOUND RIVER BASINS

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
SKAGIT RIVER at Newhalem 2	APR-SEP	2150	95	2400	1920	2650	1650	2264
	APR-JUL	1800	95	1990	1590	2220	1380	1891
	APR-JUN	1360	94	1520	1230	1680	1060	1442

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.
ROSS	1404.1	827.5	785.7	1033.9
DIABLO RESERVOIR	90.6	82.8	85.0	84.2
GORGE RESERVOIR	9.8	7.9	7.7	7.9

WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	THIS YEAR AS % OF AVERAGE
Skagit River	3	114	81
Baker River	9	135	93
Snoqualmie River	1	167	106
Skykomish River	2	111	109

WET SUBS. and DRY SUBS. represent 150 and 50 percent subsequent precipitation events respectively.
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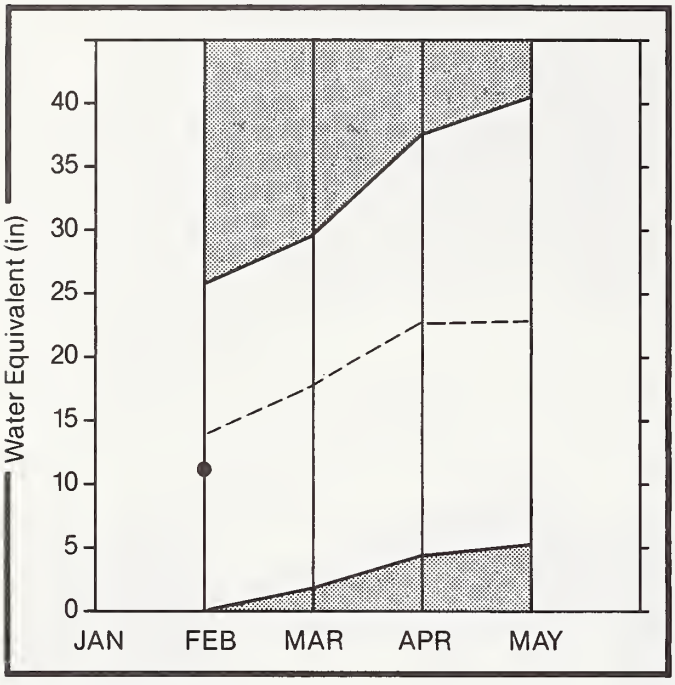
(2) - Corrected for upstream diversions or changes in reservoir storage.

OLYMPIC

Mountain snowpack* (inches)



*Based on selected stations

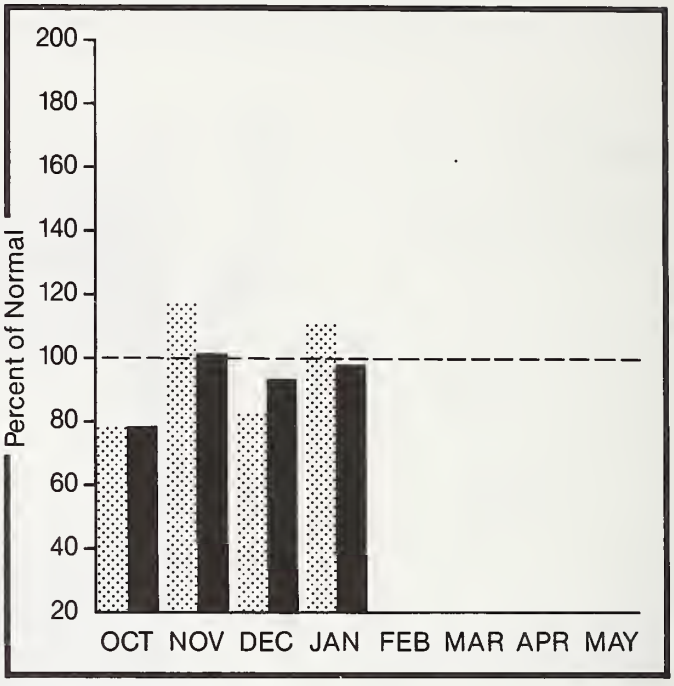
Maximum

Minimum

Average

Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

OLYMPIC PENINSULA RIVER BASIN

WATER SUPPLY OUTLOOK:

The February 1 snow cover was 81% of normal in the Olympic basins. The water year-to-date precipitation accumulation is 97% of normal, up from 93% last month. January precipitation was 109% of average. The Quillayute weather service office recorded 15.65 inches of precipitation during January. February 1 forecasts of runoff for streamflow in the basin are for 95% of average on the Dungeness River and 90% for the Elwah River. The maximum recorded snowpack was at the Cox Valley snow course where 72 inches of snow contained 22.3 inches of water. Average water content at this site is 25.5 inches for February 1. Temperatures were one degree above normal for January.

For more information contact your local Soil Conservation Service office.

OLYMPIC PENINSULA RIVER BASINS

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
DUNGENESS RIVER nr Sequim	APR-SEP	151	95	183	116	183	119	159
	APR-JUL	122	95	152	91	148	97	129
	APR-JUN	92	95	100	85	111	73	97
ELWHA RIVER nr Port Angeles	APR-SEP	500	90	570	415	610	390	553
	APR-JUL	410	90	485	340	500	320	454

RESERVOIR STORAGE (1000AF)

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.

WATERSHED SNOWPACK ANALYSIS

WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR.	AVERAGE
Dungeness River	1	61	71
Morse Creek	1	81	87
Elwha River	1	76	79

WET SUBS. and DRY SUBS. represent 150 and 50 percent subsequent precipitation events respectively.
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(2) - Corrected for upstream diversions or changes in reservoir storage.

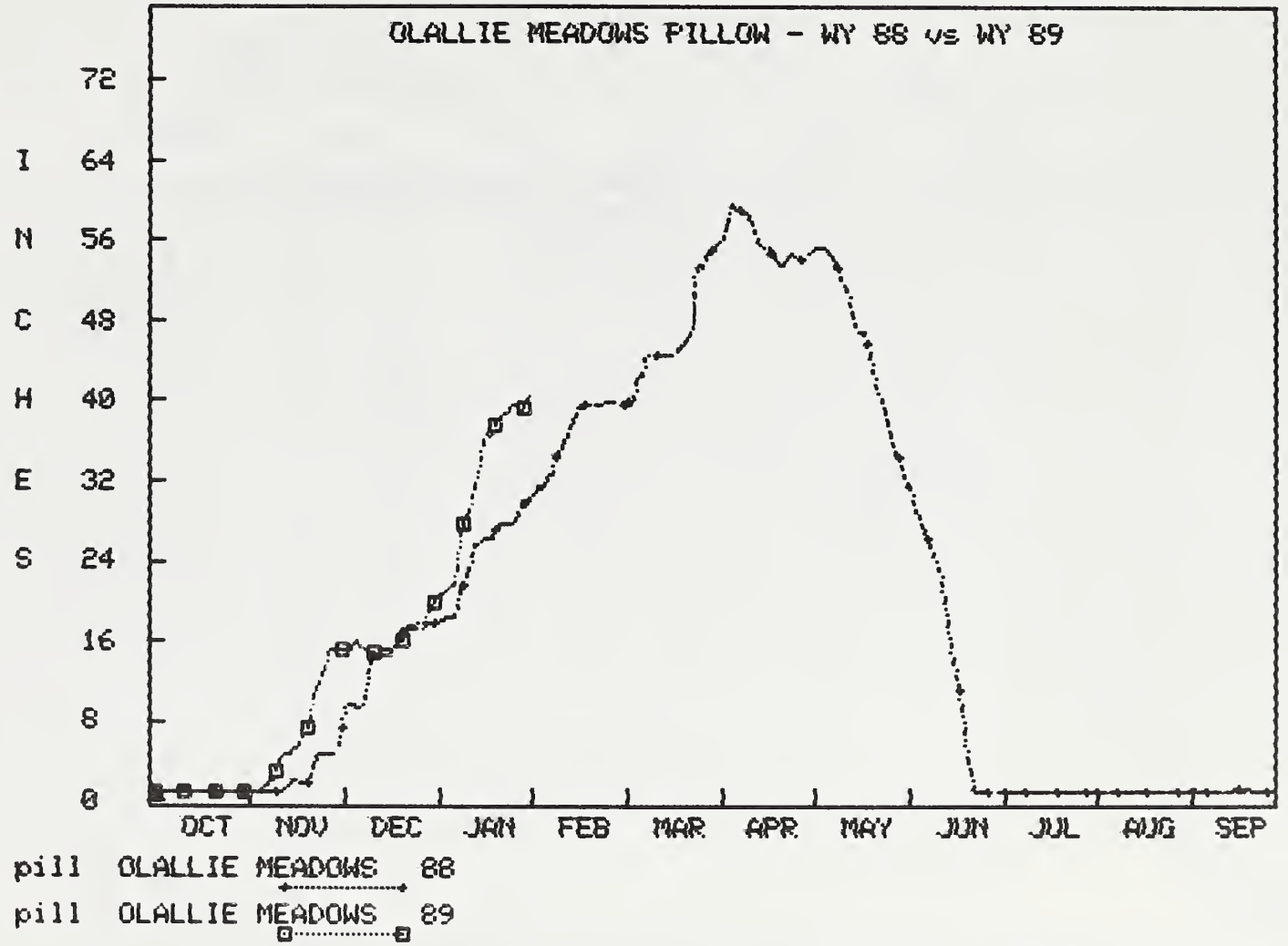
DATA CURRENT AS OF: 2/ 7/89 13:51:58

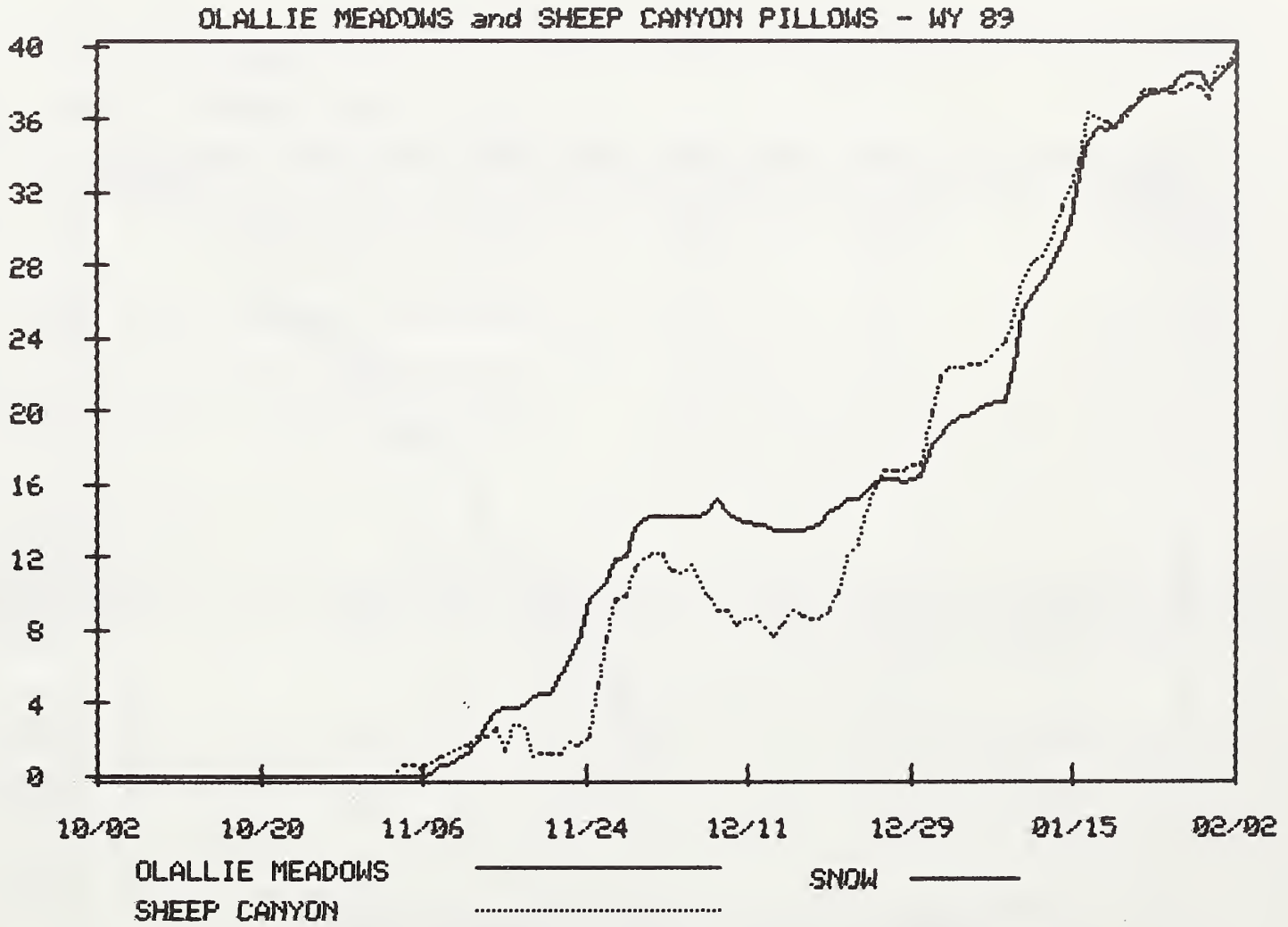
BASIN SUMMARY OF SNOW COURSE DATA

FEBRUARY 1989

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
PEND OREILLE RIVER						
BENTON MEADOW	2370	1/31/89	16	5.0	2.4	5.1
BENTON SPRING	4920	1/31/89	46	15.7	8.2	13.2
BUNCHGRASS MEADOWS	5000	1/30/89	—	20.3E	13.0	21.3
BUNCHGRASS MDW PILLOW	5000	2/01/89	—	18.6	12.6	20.9
CHEWALAH	4930	1/30/89	32	9.1	6.6	10.5
HEART LAKE TRAIL	4800	1/28/89	52	14.2	9.8	15.2
HOODOO BASIN	6050	1/28/89	96	31.1	23.5	34.6
HOODOO CREEK	5900	1/28/89	89	27.6	19.4	31.7
LOOKOUT	5140	2/06/89	61	19.8	12.6	23.6
NELSON CAN.	3100	1/31/89	35	9.1	7.6	11.3
SCHWEITZER BWL	4800	1/30/89	59	20.4	16.3	21.4
SCHWEITZER RIDGE	6200	1/30/89	83	30.5	23.6	32.2
COLVILLE RIVER						
BAIRD	3220	1/31/89	24	6.1	4.4	5.8
CHEWALAH	4930	1/30/89	32	9.1	6.6	10.5
TUGO	3370	1/30/89	22	5.8	6.2	8.2
KETTLE RIVER						
BARNES CREEK CAN.	5300	1/28/89	43	13.7	10.8	13.6
BIG WHITE MTN CAN.	5510	1/29/89	39	11.9	9.4	12.8
BUTTE CREEK	4070	1/31/89	19	4.3	5.0	6.7
CARMI CAN.	4100	1/29/89	17	3.8	2.8	5.0
FARRON CAN.	4000	1/31/89	28	8.5	5.6	9.8
GOAT CREEK	3600	1/30/89	17	4.1	4.7	5.4
MONASHEE PASS CAN.	4500	1/28/89	35	9.6	6.9	9.4
SUMMIT G.S.	4600	1/31/89	21	4.8	4.9	5.7
TRAPPING CK LOW CAN.	3050	1/28/89	19	5.6	2.5	4.2
OAK LAKE, TWIN LAKES						
MOUNT TOLMAN	2000	1/26/89	10	2.4	—	—
TWIN LAKES	2700	1/25/89	17	4.1	—	—
SPOKANE RIVER						
ABOVE POST	4100	2/06/89	—	14.3E	6.7	14.2
FOURTH OF JULY SUM	3400	1/31/89	33	11.2	5.4	7.1
LOOKOUT	5140	2/06/89	61	19.8	12.6	23.6
LOST LAKE	6110	1/26/89	106	35.2	21.0	39.1
MOSQUITO RIDGE	5200	1/31/89	77	26.0	16.2	26.2
SHERWIN	3200	1/30/89	—	15.4E	6.4	9.8
SUNSET	5540	1/30/89	60	19.7	7.4	22.8
NEWMAN LAKE						
QUARTZ PEAK PILLOW	4700	2/01/89	—	18.0	10.5	—
RAGGED RIDGE	3330	1/28/89	31	9.6	—	—
OKANOGAN RIVER						
ABERDEEN LAKE CAN.	4300	1/30/89	16	3.3	2.5	5.0
BRENDA MINE CAN.	4800	1/31/89	30	7.9	5.1	9.1
BROOKMERE CAN.	3200	1/30/89	17	4.8	1.4	6.5
ENDERBY CAN.	6200	1/31/89	74	25.9	23.4	24.8
ESPERON CK. RID CAN.	4690	1/29/89	34	9.4	8.0	10.8
GREYBACK RES CAN.	5120	1/30/89	20	4.8	3.0	6.1
HAKILTON HILL CAN.	4890	1/29/89	36	9.8	6.4	10.8
HARTS PASS PILLOW	6500	2/01/89	—	29.2	24.4	39.1
MCCULLOCH CAN.	4200	2/01/89	19	4.0	3.0	5.0
MISSEZULA MTN CAN.	5090	1/28/89	22	5.0	4.4	6.9
MISSION CREEK CAN.	5800	1/30/89	41	12.8	9.6	13.3
MONASHEE PASS CAN.	4500	1/28/89	35	9.6	6.9	9.4
MT. KOBAU CAN.	5900	1/29/89	21	5.0	8.8	8.7
MUTTON CREEK #1	5700	1/30/89	22	6.6	11.7	9.7
OYAMA LAKE CAN.	4400	1/30/89	18	3.8	3.4	5.0
POSTILL LAKE CAN.	4500	1/31/89	21	4.9	2.9	5.8
RUSTY CREEK	4000	1/30/89	13	3.2	4.8	5.3
SALMON MEADOWS	4500	1/30/89	19	3.3	6.8	7.2
SALMON MDWS PILLOW	4500	2/01/89	—	5.5	6.5	10.3
SILVER STAR MTN CAN.	6000	1/29/89	54	18.9	16.6	19.2
SUMMERLAND RES CAN.	4200	1/31/89	23	6.6	3.3	7.0
SUNDAY SUMMIT CAN.	4300	1/29/89	16	3.8	3.1	4.8
TROUT CREEK CAN.	4690	1/30/89	20	5.4	3.4	5.6
VASEUX CREEK CAN.	4600	1/31/89	15	3.2	3.4	4.4
WHITE ROCKS MTN CAN.	6000	2/01/89	42	13.2	13.2	15.7
METHOW RIVER						
HARTS PASS PILLOW	6500	2/01/89	—	29.2	24.4	39.1
MUTTON CREEK #1	5700	1/30/89	22	6.6	11.7	9.7
RUSTY CREEK	4000	1/30/89	13	3.2	4.8	5.3
SALMON MEADOWS	4500	1/30/89	19	3.3	6.8	7.2
SALMON MDWS PILLOW	4500	2/01/89	—	5.5	6.5	10.3
CHELAN LAKE BASIN						
LYMAN LAKE PILLOW	5900	2/01/89	—	43.1	36.7	45.0
LITTLE MDWS AM	5280	1/27/89	94	31.0	30.8	29.7
PARK CK RIDGE PILLOW	4600	2/01/89	—	32.3	34.7	32.3
RAINY PASS PILLOW	4780	2/01/89	—	23.3	22.7	34.3
ENTIAT RIVER						
BRIEF	1600	2/01/89	15	5.0	6.1	6.1
POPE RIDGE	3540	2/01/89	38	11.6	14.9	13.6
WENATCHEE RIVER						
BERNE-MILL CREEK	3170	1/31/89	54	18.1	18.7	20.0
BLEWETT PASS #2	4270	1/27/89	32	10.4	10.1	11.9
BLEWETT PASS#2 PILLOW	4270	2/01/89	—	11.5	12.4	18.1
CHIWAUKUM G.S.	2500	1/31/89	21	4.6	10.2	8.9
LYMAN LAKE PILLOW	5900	2/01/89	—	43.1	36.7	45.0
MERRITT	2140	1/31/89	26	8.6	10.0	13.0
MISSION RIDGE	5000	1/26/89	34	10.1	11.4	—
STEVENS PASS PILLOW	4070	2/01/89	—	36.0	30.0	29.7
STEVENS PASS SAND SD	3700	1/31/89	66	22.7	22.7	24.3

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
COLOCKUM CREEK						
TROUGH #2 PILLOW	5310	2/01/89	—	2.2	8.5	8.7
STEMILT CREEK						
STEMILT SLIDE	5000	2/01/89	29	8.5	11.1	10.5
UPPER WHEELER	4400	2/01/89	20	5.6	6.1	8.4
YAKIMA RIVER						
AHTANUM R.S.	3100	1/26/89	17	3.8	5.6	6.0
BIG BOULDER CREEK	3200	1/26/89	42	11.9	13.0	—
BLEWETT PASS #2	4270	1/27/89	32	10.4	10.1	11.9
BLEWETT PASS#2 PILLOW	4270	2/01/89	—	11.5	12.4	18.1
BUMPING LAKE	3450	1/30/89	22	7.1	10.3	11.8
BUMPING LAKE (NEW)	3400	1/31/89	32	9.8	13.1	14.5
CAYUSE PASS	5300	1/26/89	142	53.2	36.9	54.1
COLOCKUM PASS	5370	1/31/89	28	9.3	11.3	11.8
CORRAL PASS PILLOW	6000	2/01/89	—	26.3	21.8	24.9
FISH LAKE	3370	1/26/89	67	21.3	18.9	—
FISH LAKE PILLOW	3370	2/01/89	—	22.3	20.6	25.6
GREEN LAKE	6000	1/26/89	51	19.6	21.8	23.4
GREEN LAKE PILLOW	6000	2/01/89	—	13.9	16.3	14.3
GROUSE CAMP	5380	1/30/89	31	10.5	11.8	12.4
GROUSE CAMP PILLOW	5380	2/01/89	—	15.5	14.6	13.6
LAKE CLE ELUM	2200	1/27/89	15	4.5	5.1	7.3
MORSE LAKE PILLOW	5400	2/01/89	—	33.7	41.0	34.8
STAMPEDE PASS PILLOW	3860	2/01/89	—	35.5	25.1	37.0
SASSE RIDGE PILLOW	4200	2/01/89	—	23.5	20.4	24.8
TUNNEL AVENUE	2450	1/27/89	39	13.1	11.5	15.7
WHITE PASS E.S.	4500	1/29/89	35	10.6	12.9	16.9
WHITE PASS ES PILLOW	4500	2/01/89	—	14.6	13.6	17.2
AHTANUM CREEK						
AHTANUM R.S.	3100	1/26/89	17	3.8	5.6	6.0
GREEN LAKE PILLOW	6000	2/01/89	—	13.9	16.3	14.3
MILL CREEK						
HIGH RIDGE PILLOW	4980	2/01/89	—	36.5	11.4	20.8
LEWIS AND COWLITZ RIVERS						
CAYUSE PASS	5300	1/26/89	142	53.2	36.9	54.1
JUNE LAKE PILLOW	3200	2/01/89	—	39.2	—	19.5
LONE PINE PILLOW	3900	2/01/89	—	22.3	15.9	28.6
POTATO HILL PILLOW	4500	2/01/89	—	18.8	15.2	21.2
SHEEP CANYON PILLOW	4050	2/01/89	—	39.2	—	30.7
SPENCER MDW PILLOW	3400	2/01/89	—	23.5	16.6	19.4
SPIRIT LAKE PILLOW	3100	2/01/89	—	12.5	3.5	10.0
STRAWBERRY L. PILLOW	3280	2/01/89	—	35.8	31.8	35.9
SURPRISE LKS PILLOW	4250	2/01/89	—	40.0	17.1	36.0
WHITE PASS E.S.	4500	1/29/89	35	10.6	12.9	16.9
WHITE PASS ES PILLOW	4500	2/01/89	—	14.6	13.6	17.2
WHITE RIVER						
CAYUSE PASS	5300	1/26/89	142	53.2	36.9	54.1
CORRAL PASS	6000	1/28/89	59	20.0	22.2	—
CORRAL PASS PILLOW	6000	2/01/89	—	26.3	21.8	24.9
MORSE LAKE PILLOW	5400	2/01/89	—	33.7	41.0	34.8
GREEN RIVER						
COUGAR MTN. PILLOW	3200	2/01/89	—	18.8	10.7	18.6
GRASS MOUNTAIN #3	2100	2/05/89	7	3.0	3.7	3.8
LESTER CREEK	3100	2/05/89	58	19.0	10.1	15.2
LYNN LAKE	4000	2/05/89	63	26.0	12.3	18.1
SAWMILL RIDGE	4700	2/05/89	70	25.0	17.6	24.3
STAMPEDE PASS PILLOW	3960	2/01/89	—	35.5	25.1	37.0
TWIN CAMP	4100	2/05/89	63	24.0	15.3	16.8
SNOQUALMIE RIVER						
KHOMUNA MINE	2600	1/24/89	75	28.5	12.2	—
OLNEY PASS	3250	1/24/89	63	25.3	7.9	—
SKYKOMISH RIVER						
STEVENS PASS PILLOW	4070	2/01/89	—	36.0	30.0	29.7
STEVENS PASS SAND SD	3700	1/31/89	66	22.7	22.7	24.3
SKAGIT RIVER						
HARTS PASS PILLOW	6500	2/01/89	—	29.2	24.4	39.1
LYMAN LAKE PILLOW	5900	2/01/89	—	43.1	36.7	45.0
RAINY PASS PILLOW	4780	2/01/89	—	23.3	22.7	34.3
BAKER RIVER						
DOCK BUTTE AM	3800	2/05/89	102	41.0	32.4	41.6
EASY PASS AM	5200	2/05/89	116	40.1	31.1	46.5
JASPER PASS AM	5400	2/05/89	128	41.2	42.9	60.6
MARTEN LAKE AM	3600	2/05/89	132	52.8	32.8	49.2
MT. ELUM AM	5800	2/05/89	93	37.2	23.6	42.8
SCHREIBERS MDW AM	3400	2/05/89	92	36.8	27.8	35.6
SF THUNDER CK AM	2200	2/05/89	8	3.3	1.4	7.0
WATSON LAKES AM	4500	2/05/89	104	41.8	30.4	39.5
DUNGENESS RIVER						
DEER PARK	5200	1/30/89	33	9.8	16.1	13.9
HORSE CREEK						
COX VALLEY	4500	1/27/89	72	22.3	27.7	25.5
ELWHA RIVER						
HURRICANE	4500	1/29/89	36	11.2	14.8	14.2


OLALLIE MEADOWS PILLOW - WY 88 vs WY 89
72
I 64
N 56
C 48
H 40
E 32
S 24
16
8
0
OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP
pill OLALLIE MEADOWS 88
pill OLALLIE MEADOWS 89


OLALLIE MEADOWS and SHEEP CANYON PILLOWS - WY 89
40
36
32
28
24
20
16
12
8
4
0
10/02
10/20
11/06
11/24
12/11
12/29
01/15
02/02
OLALLIE MEADOWS
SHEEP CANYON
SNOW

The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

Canada:

Ministry of the Environment, Water
Investigations Branch, Victoria, British Columbia

States:

Washington State Department of Ecology
Washington State Department of Natural Resources

Federal:

Department of the Army
- Corps of Engineers

U.S. Department of Agriculture
- Forest Service

U.S. Department of Commerce
- NOAA, National Weather Service

U.S. Department of the Interior
- Bonneville Power Administration
- Bureau of Reclamation
- Geological Survey
- National Park Service
- Bureau of Indian Affairs

Local:

City of Tacoma
City of Seattle
Chelan County P.U.D.
Pacific Power and Light Company
Puget Sound Power and Light Company
Washington Water Power Company
Snohomish County P.U.D.
Colville Confederated Tribes
Spokane County

Private:

Okanogan Irrigation District
Wenatchee Heights Irrigation District
Newman Lake Homeowners Association

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

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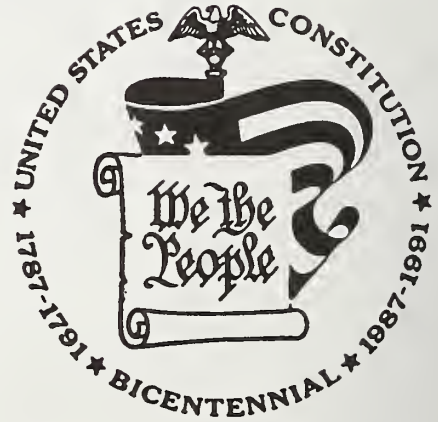

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